

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



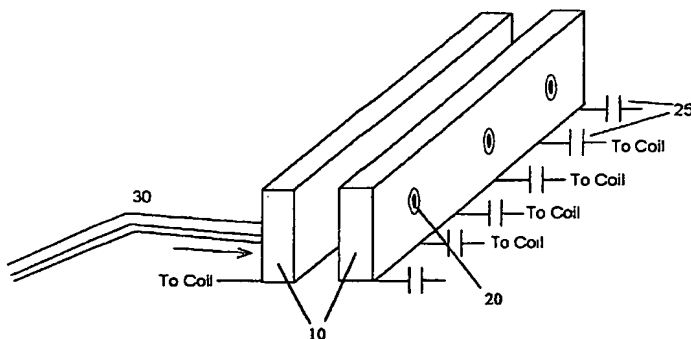
(43) International Publication Date
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number
WO 2004/001434 A1

- (51) International Patent Classification⁷: **G01R 33/36**,
G01V 3/00
- (74) Agent: WRAY & ASSOCIATES; Level 4, The Quadrant,
1 William Street, Perth, Western Australia 6000 (AU).
- (21) International Application Number:
PCT/AU2003/000801
- (22) International Filing Date: 25 June 2003 (25.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
PS 3191 25 June 2002 (25.06.2002) AU
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **QR-
SCIENCES TECHNOLOGIES PTY LTD** [AU/AU];
8-10 Hamilton Street, Cannington, Perth, Western Aus-
tralia 6107 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **FLEXMAN, John,
Harold** [AU/AU]; 11 Thomas Way, Kardinya, Perth, West-
ern Australia 6163 (AU). **AITKEN, Christopher, Nor-
man** [AU/AU]; 8-10 Hamilton Street, Cannington, Perth,
Western Australia 6107 (AU).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: LOW ESR SWITCH FOR NUCLEAR RESONANCE MEASUREMENTS



(57) **Abstract:** A low equivalent series resistance (ESR) switch for selectively adding to a coil-capacitor circuit of a nuclear or electron resonance system. The switch comprises a pair of physically and electrically contacting members having mutually large contact surface areas. The members are movable between a quiescent position where the contact surface areas are separated by a small distance and an active position where the contact surface areas are brought into physical and electrical contact to connect into the coil-capacitor circuit.

WO 2004/001434 A1